STREAM ECOLOGY

Vorosmarty et al. 2010. Nature 467: 555-561.

This reading and homework are designed to get you thinking about global water conservation. Please answer the following questions in an organized fashion, using proper grammar and sentence structure. Please bring a hard copy of this assignment to class.

1. What data did this study collect and what did this data mean (please reference specific figures in your response)?

2. Stressors can impact both biodiversity and human water security. Provide one example from the paper of how a stressor impacts biodiversity but does little to human water security. Provide one example of how a stressor can negatively impact both.

3. What is the relationship between the spatial distribution of threats to human water security and biodiversity? What characteristics are associated with certain regions with high threat?

4. You suddenly won the LottoMaxPowerBallLottery and now have 1 billion dollars. After spending some of it on important things such as food, tuition, and beer, you decided you want to donate the remaining 999 million dollars. Of course, you decided to use all of this to support river conservation. Given the Vorosmarty analyses, where and in what would you invest your resources to most efficiently improve global river biodiversity and water? Where and in what would you invest to improve global river biodiversity and water? (Please be specific and reference specific figures in your response).